

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0117676; AI 43293; PER20050002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Southeastern Louisiana Water & Sewer Company, LLC
Highway 22 Sewage Treatment Plant
350 North Causeway Boulevard
Mandeville, LA 70448
- II. **PREPARED BY:** Todd Franklin
- DATE PREPARED:** December 16, 2005
- III. **PERMIT ACTION:** revoke and reissue LPDES permit LA0117676, AI 43293; PER20050002
for the increase in design capacity of the Highway 22 Sewage Treatment
Plant from 0.28 MGD to 0.50 MGD

LPDES application received: August 17, 2005

EPA has not retained enforcement authority.

LPDES permit issued: March 1, 2004

LPDES permit expires: February 28, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment facility serving five residential subdivisions, one residential condo community, two apartment complexes, a state park, and various light commercial facilities. The following is a detailed commercial user list: Franco's Athletic Club, The Lampstand, Wad Partridge Ins., Shipping Post, Seal Sports, Tip Top Shoe Repair, Hero's All-American Grill, Fisher's Restaurant, Wegmann's Florist, Geo W. Stokes, Co., Essential Salon, Up Tempo Fred Astaire Studio, PV Acquisitions, Parkview Apartment Clubhouse, G.K. Ross, LLC, Penn Chapel Clubhouse, Wedgewood Subdivision, Indian Point Subdivision, Pineland Subdivision, Bon Temps Roule Subdivision, Parkview Apartments, Gaslight Square, Riverwalk, Deloaks Subdivision, Fairview State Park, Crosby Mandeville Lakes, Penn's Chapel Subdivision, Fairview Oaks Business, and Houltonville Estates.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on the south side of LA Highway 22, just east of the Tchefuncte River east of Madisonville, St. Tammany Parish.
- D. The treatment facility consists of an extended aeration mechanical treatment plant with an activated sludge return process. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 30° 24' 21" North
 Longitude 90° 8' 32" West

Description: treated sanitary wastewater

Average Expected Flow: 520 homes @ 400 GPD each = 0.208 MGD
 365 2-BR apartments @ 300 GPD each = 0.1095 MGD
 16 3-BR apartments @ 400 GPD each = 0.0064 MGD
 684 employees @ 20 GPD each = 0.01368 MGD
 25 showers @ 20 GPD each = 0.0005 MGD
 92 restaurant seats @ 35 GPD each = 0.00322 MGD
 135 person pool @ 10 GPD / person = 0.00135 MGD
 1,600 guests @ 5 GPD each = 0.008 MGD
 100 seats in assembly halls @ 2 GPD each = 0.0002 MGD
 Expected flow from the Fairview State Park = 0.011 MGD

Total Expected Flow: 0.36185 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Design Flow: 0.5 MGD

Type of Flow Measurement which the facility is currently using: 90' V-Notch Weir with mounted Staff Gauge & Continuous Recorder with Circular Chart

V. RECEIVING WATERS:

The discharge is into local drainage; thence into Hog Island Canal; thence into the Tchefuncte River in segment 040803 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040803 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

| Overall Degree of Support for Segment | Degree of Support of Each Use | | | | | | |
|---------------------------------------|-------------------------------|------------------------------|--------------------------------|------------------------------------|-----------------------|------------------------|-------------|
| | Primary Contact Recreation | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shell fish Propagation | Agriculture |
| Partial | Not Supported | Full | Not Supported | N/A | N/A | N/A | N/A |

^{1/}The designated uses and degree of support for Segment 040803 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040803 of the Lake Pontchartrain Basin, is listed in Section II.2 of the Implementation Strategy in a letter dated October 21, 2005, from Watson (FWLS) to Gautreaux (LDEQ), as a habitat for the Gulf Sturgeon, which is listed as an endangered species. No consultation is needed, as instructed in the March 22, 1996, Memorandum of Understanding (MOU) between LDEQ and FWLS, since this source is for a minor sanitary discharge.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 040803, Lower Tchefuncte River-From La. Hwy. 22 to Lake Pontchartrain, is listed on LDEQ's Final 2004 303(d) List as impaired for organic enrichment/low DO, pathogen indicators, and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Organic Enrichment / Low DO

To protect against the potential for discharges of oxygen consuming pollutants that could cause instream DO problems and for discharges of organic materials and nutrients at levels exceeding state water quality standards, CBOD₅, NH₃-N, and DO limits have been established in the permit.

Pathogen Indicators

To protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits have been established in the general permit.

Mercury

According to the 2004 303(d) List, the cause of the mercury impairment is from atmospheric deposition. Due to this reason and based on the fact that the Highway 22 Sewage Treatment Plant is classified as a minor discharge, no requirements for mercury shall be placed into the permit.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Weekly Avg. | Basis |
|-------------------------|-------------------------|--------------|-------------|--|
| CBOD ₅ | 41.7 | 10 mg/l | 15 mg/l | Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size. |
| TSS | 62.6 | 15 mg/l | 23 mg/l | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |
| Oil and Grease | --- | --- | 15 mg/l | Best Professional Judgement (BPJ) based on the previous permit. |
| Ammonia-Nitrogen | 20.9 | 5 mg/l | 10 mg/l | Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size. |

| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Weekly Avg. | Basis |
|-------------------------|----------------------------|--------------|-------------|---|
| Dissolved Oxygen | --- | 4 mg/l | N/A | BPJ based on the organic enrichment/low DO impairment found in the receiving waterbody. |

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.

PREVIOUS PERMITS:

LPDES Permit No. LA0117676: Issued: March 1, 2004

Expired: February 28, 2009

| Effluent Characteristic | Discharge Limitations | | Monitoring Requirements | |
|-------------------------|-------------------------|---------------|-------------------------|-------------|
| | Monthly Avg. | Weekly Avg... | Measurement Frequency | Sample Type |
| Flow | Report | Report | Continuous | Recorder |
| CBOD ₅ | 10 mg/l | 15 mg/l | 2/month | Grab |
| TSS | 15 mg/l | 23 mg/l | 2/month | Grab |
| Ammonia-Nitrogen | 5 mg/l | 10 mg/l | 2/month | Grab |
| Dissolved Oxygen | 4.0 mg/l | --- | 2/month | Grab |
| Fecal Coliform | | | | |
| Colonies/100 ml | 200 | 400 | 2/month | Grab |
| pH | Range – 6.0 su – 9.0 su | | 2/month | Grab |

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

An inspection conducted for this facility on August 24, 2004, revealed that the calculated flow meter calibration check percent error was +50.6%, at the time of the site visit.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Consolidated Compliance Order & Notice of Potential Penalty

Enforcement Tracking No. WE-CN-03-0069

Date Issued – December 19, 2003

Findings of Fact:

1. The Respondent is the owner and/or operator of numerous sewage treatment plants that receive wastewater from private residences, businesses, and commercial entities located in St. Tammany Parish, Louisiana.
2. The Respondent owns and/or operates a facility known as the Highway 22 STP located east of the Town of Madisonville in St. Tammany Parish, Louisiana. The Respondent was authorized to discharge treated sanitary wastewater in the La. Hwy. 22 ditch; thence into Hog Island Bayou; thence into the Lower Tchefuncte River, waters of the state, under Louisiana Water Discharge Permit System (LWDPS) permit WP 5197, effective on July 15, 1996, and which expired on July 10, 2001. The Respondent failed to apply for an LPDES permit in a timely manner; therefore, the Respondent does not have any authority to discharge into waters of the state. On October 23, 2003, the Department issued the Respondent draft LPDES permit LA0117676.

A file review of the DMRs prepared and submitted by the Respondent to the Department, and a review of the compliance inspections conducted by representatives of the Department, revealed numerous effluent excursions, monitoring frequency discrepancies, and operation and maintenance and/or records/reports violations.

Order:

1. To immediately cease all unauthorized discharges from the Respondent's Hwy. 22 STP to waters of the state.
2. To protect water quality in the event of a discharge from the Hwy. 22 STP by complying with the interim effluent limitations and monitoring requirements set forth below:
The Respondent shall comply with all the terms and provisions of expired LWDPS permit WP 5197 until otherwise notified by the Department.
3. To submit to the Enforcement Division a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with this compliance order.

C) DMR Review

A review of the discharge monitoring reports for the period beginning July 1, 2003, through June 30, 2005, has revealed no effluent violations (DMRs for the months from October through December 2004 were missing from the file).

XII. ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Lake Pontchartrain Basin scheduled for completion in 2011. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.5 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.5 \text{ MGD} \times 10 \text{ mg/l} = 41.7 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

| <u>Effluent Characteristics</u> | <u>Monitoring Requirements</u> | |
|---------------------------------|--------------------------------|--------------------|
| | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| Flow | Continuous | Recorder |
| CBOD ₅ | 2/month | Grab |
| Total Suspended Solids | 2/month | Grab |
| Oil & Grease | 2/month | Grab |
| Ammonia-Nitrogen | 2/month | Grab |
| Dissolved Oxygen | 2/month | Grab |
| Fecal Coliform Bacteria | 2/month | Grab |
| pH | 2/month | Grab |

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to revoke and reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Statement of Basis

LA0117676; AI 43293; PER20050002

Page 8

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, Highway 22 Sewage Treatment Plant, August 17, 2005.